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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/069,732

02/26/2002

Hiroaki Nemoto

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EXAMINER

DINH, TAN X

ART UNIT

PAPER NUMBER

2627

MAIL DATE

DELIVERY MODE

05/08/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/069,732

Applicant(s)

NEMOTO ET AL.

Examiner

TAN X. DINH

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period **will** apply and **will** expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply **will**, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-21 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

1) A Request for Continued Examination (RCE) under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/25/2009 has been entered.

2) The amendment/preliminary amendment filed 2/25/2009 is acknowledged. Claims 1-17, 22 and 23 have been canceled. New claim 24 is added.

3) The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The following title is suggested:

**MAGNETO-OPTICAL RECORDING DEVICE CAPABLE OF CHANGING THE
SHAPES OF HEATING AREAS.**

4) Applicant is reminded of the proper language and format for an abstract of the disclosure.

It appears that the abstract is not limited to a single paragraph. A new abstract is required in next communication.

5) The drawings are objected to because *figure 4* should be designated by a legend such as --PRIOR ART-- since only that which

is old is illustrated. See MPEP § 608.02(g).

Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application.

The replacement sheet(s) should be labeled as "REPLACEMENT SHEET " in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures.

If the changes are not accepted by the Examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

6) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

7) (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8) Claims **18-21** are rejected under 35 U.S.C. 102(b) as being anticipated by MURAKAMI et al (6,091,673).

MURAKAMI et al discloses an information recording and reproducing apparatus for recording information by forming an

information pit determined by a magnetic domain on a track in a magnetic recording disk, the information pit being formed by applying a magnetic recording field and heating a certain portion of the track, as claimed in claim 18, comprising:

means for heating the information pit by generating a heated area on the track (Fig.1, optical heat 1);

a magnetic head for applying the magnetic field to the information pit and for sensing the information pit on the track (Fig.1, magnetic head 3);

a swing arm for holding and positioning the magnetic head to desired portions on the track (Fig.1, swing arm 12 and 13); and

magnetic head including a magnetic flux detecting means (Fig.1, magnetic coils 4);

means for controlling an orientation of a shape of the heated area with respect to the track according to a radial position on the disk so that the orientation is coincident with a longitudinal direction of the magnetic flux detecting means according to the track (Fig.3, focusing coil 10 and tracking coil 17 control the orientation of the focused spot (shape of the heated area)).

As to claim 19, MURAKAMI et al shows a second swing arm for holding and positioning the means for heating information pits (Fig.3, swing arm for holding optical head 1).

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As to claim 20, MURAKAMI et al shows an optical device for forming a light spot on the track (Fig.1, objective lens 2).

As to claim 21, MURAKAMI et al shows the distance between a rotational axis of the swing arm and a rotational axis of the disk and a distance between a rotational axis of the second swing arm and the rotational axis of the disk is substantially the same, and a distance between the magnetic flux detecting means and the rotational axis of the swing arm and a distance between the means for heating the information pit and the rotational axis of the second swing arm is substantially the same (Fig.1, the distance between a rotational axis of the swing arms and a rotational axis of the disk are always the same).

9) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10) This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made

absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(c), (f) or (g) prior art under 35 U.S.C. 103(a).

11) Claim **24** is rejected under 35 U.S.C. 103(a) as being unpatentable over **MURAKAMI et al (6,091,673)**.

MURAKAMI et al discloses all the subject matter as claimed in claim 24, *except to specifically shows that* the shape of the heated area controls the shape of the heated area to be non-circular such that the orientation of the shape of the heated area with respect to the track changes from an innermost circumference to an outermost circumference of the disk. However, this feature is old and widely used in the magneto-optical recording art as admitted by applicant in figures 1-4 and 16. Obviously, anyone within the level of skill in the art at the time of the invention was made would apply this well known feature in MURAKAMI et al's magneto-optical recording device for recording magnetic domains as claimed.

12) Applicant's arguments filed **2/25/2009** have been fully considered but they are not persuasive.

Applicant states that the shape of heating area in MURAKAMI et al's magneto-optical recording device is circular at radial position varies. However, claims **18-20** did not specific recited the feature of heating areas (light spot) is non circular and the phase-plate 111 (figure 11) generates intensity distribution 121 (figure 12) as two-headed spot. It is also noted that, the *focusing coil 10* and *tracking coil 17* control the orientation of the focused spot (MURAKAMI et al's figure 3), which is the same functions as claimed in claims 18-20. For that reasons, the claims are found still rejectable as shown above.

13) The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Applicant is reminded that in amending in response to a rejection of claims (if the rejection involves with any applicable arts), the patentable novelty must be clearly shown in view of the state of the art disclosed by the references cited and the objection made. Applicant must also show how the amendments avoid such references and objections. See 37 CFR § 1.111(c).

Form PTO-892 is attached herein.

14) Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAN Xuan DINH

whose telephone number is (571)272-7586. The examiner can normally be reached on Monday - Friday from 9:00AM to 5:00PM.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/TAN Xuan DINH/
Primary Examiner, Art Unit 2627
May 7, 2009